



July, 2016
Volume 55 Issue 07

MARANews



Revised Newsletter

Next meeting July 19, 2016 at the Bridgewater Public Library

July 19, 2016 at the library no speaker

August 16 no speaker available at this time

Outgoing Presidents notes N1EZH Barry Kennedy

Outgoing Presidents Message for July 2016 from Barry – N1EZH:



This will be my final President's Message as Summer is here and with that comes our annual MARA Elections! Congratulations to Denise – KC1CFO – President, Jeff – N1ZZN – V. President (Also said he will take notes at our MARA meetings until Larry – K1LJK is able to return, thanks Jeff!), Larry – K1LJK – Secretary, and Phil – N1XTB – Treasurer.

I could not have done what we have done these past 5 years as your President without the help of so many members of our club!

Before Carl – N1FY left on his world adventure he was instrumental along with Phil – N1XTB and others to help establish a presence for our club at the new Bridgewater EOC. He also headed up many of the Road Races and Special Events we give our communication support to today.

Roy – KB1CYV has helped us with so many things over the years as well! From helping me early on as V. President to take notes as Interim Secretary when there was no Secretary or President that first year was a big help. Roy has helped out with our communications at many Road Races and other Events, is a regular Net Control for our weekly Tuesday MARA Net and especially just about every week all year long as the Net Control for our South Shore Skywarn Net on Saturday night!

Rick – KB1TEE has done so much for our club as well. From being our V. President my second year, to taking over our MARA Newsletter from Pete – N1NVV (Who also was my predecessor as President and takes care of our W1MV Website – thanks Pete!) and doing an excellent job with it, arranging his N. Middleboro Fire Station for our "Spring Fling" Pot Luck, along with his YL Patty hosting our Taunton ACG (More of a MARA / WARC event now!), for "The Bruce" - N1X Celebrative BBQSO at their home, the Battleship Massachusetts –W1BSA Special Event, and all the Presenters he has put together including himself at our MARA Meetings! All of this and more including being a regular Net Control for our Tuesday MARA Net is what has kept our MARA club going the past few years! Thank you so much for making my job as President a lot easier!

Jeff – N1ZZN has become our V. President the past couple of years and has done a great job keeping both our MARA – W1MV 147.180 & 444.550 Repeaters working, along with our WARC- WA1NPO Repeater and others in the area going as well! (Thanks to Gary – AB1CQ & Phil – N1XTB for their help and support as well!) He also helps out with our weekly Tuesday MARA Net from time to time and has been the Net Control during Skywarn Activations on our MARA – W1MV 147.180 Repeater! He has also run our monthly meeting several times during my absence.

Phil – N1XTB has been our Treasurer for as long as I can remember, has helped Jeff – N1ZZN with our Repeater issues and updates, maintained our MARA Membership List and is in charge of our Bridgewater EOC Amateur Radio Group during Drills or Emergencies.

Larry – K1LJK – has been our Secretary for the past few years as well, and has done a great job taking our meeting notes and getting them to Rick – KB1TEE for our MARA Newsletter. Hopefully we will see him back soon as he recovers from a bad fall earlier this year! We all miss you Larry!

John – N1UMJ & Jessica – N1MOJ have helped out as our Net Control during the YMCA Camp Yomechas Woody's Walk, 5K-10K and Triathlon the past couple of years along with many of our other MARA and non-MARA members who have helped provide communications support for these events!

There are more of you that have helped with presentations at our club meetings as well; Richard – AG1B, Bill – NR1FD, Jay – N1FDX, and other guest presenters at our club, along with communication and participation support at our other events, Field Day with WARC at the E. Bridgewater YMCA or our Spring Fling Pot luck, and I appreciate everything that you all have done in support of me as your President and our club!

Also as "The Bruce" – N1IX (SK) used to say; If there is no photo, it didn't happen! I have come to realize that this is more than just a saying, it is a reflection of who we are, the great times we spend together in our Amateur Radio hobby, a history of our sharing of our lives together and a way to remember the wonderful people who have made a positive impact on our lives, like Bruce and all of you have for me during my time as President of MARA and with all the great times we have shared together over the years! Below are only a few photos of the many memories from our last several years together! May there be many more for all of us!

In closing please remember that no leader is successful without the whole team coming together to make things happen!

Now our newly elected President - Denise – KC1CFO will need the help and support of every one of our MARA members and others to continue on with our great club and Amateur Radio Hobby!

73 de Barry – N1EZH

Outgoing President – Massasoit Amateur Radio Association

Below: MARA Volunteers from the Camp Yomechas Triathlon in July 2013.

Pete Curley N1NVV

Carl Aveni N1FY

Bob Keene N1LCY



Roy Logan KB1CYV

Kevin Dykes KB1MOC

Walter Fitzgerald W1WCF



Top: At our Taunton ACG – BBQSO in August 2013. This would be “The Bruce” – NI1X (SK) last year as he passed away shortly after this photo was taken! The following year and years since the annual NI1X – Celebratory BBQSO has been named in his honor to celebrate his life and for his years of dedication to Amateur Radio, and for his guidance in helping to make many of us better Ham Radio Operators!. In the photos are: Barry Kennedy – N1EZH, Bill Burke – NR1FD, Jim Wolf – N1JCW, Pete Curley – N1NVV, Rick Emord - - KB1TEE, Bruce Hayden – NI1X (SK).

Bottom: At our MARA November 2013 meeting, Bill – NR1FD giving his presentation on Fire Safety.



Top: At our MARA November 2013 meeting some of our MARA members listening intently to Bill – NR1FD giving his presentation on Fire Safety! In the photos are: Pete – N1NVV, Loren – N1IQI, Jay – N1FDX, Walt – W1WCF, Larry – K1LJK, Jim – KC1JET, Carl – N1FY. Photos by Barry – N1EZH

Below: MARA Volunteers preparing for YMCA Camp Yomechas Woody's Walk-5K-10K-Road Race on June 07, 2014. In the photo is: Bob – N1LCY, Pete – N1NVV, Carl – N1FY, John – N1UMJ, Barry – N1EZH, Roy – KB1CYV.



Top: MARA Member Volunteers at our Bridgewater EOC Entergy – Pilgrim Power Plant Drill Training on November 12, 2014. In the photo: NOAH – KB1VWZ, Pete – N1NVV, Bob – N1EDM, Phil – N1XTB (EOC Amateur Radio Group Leader), Richard – AG1B, Bill – NR1FD, Roy – KB1CYV, Rick – KB1CYV. Photos by Barry – N1EZH

Bottom: At our November 2014 MARA meeting Jay – N1FDX gives a presentation on his “GO KIT”.



Thanks to Rick – KB!TEE who arranged the setup of our W1BSA Special Event onboard the USS Massachusetts in Fall River inside the Ward Room on Saturday March 7, 2015 are: Quinn – KB1TRY, Ed – SWL, Jay – N1FDX, Rick – KB1TEE, Lee – N1ALL and John – N1UMJ. Below is Bob – N1EDM with his P3 Orion Headset getting ready for CW down in the Ship’s Radio Room! There were several other local area Hams that helped out with setup and Operating throughout our Special Event. Photos by Barry – N1EZH



Above: At our July 21, 2015 MARA Meeting, Bob - N1EDM gave a very interesting presentation about his work with communications on some of the P3 Orion's he served aboard. Some of our Members and Guests in attendance were; John - N1UMJ, Richard - AG1B John - WD1L, Walt - W1WCF, Joe - KB1ZBJ, Loren - N1IQI., Jay - N1FDX's daughter Cat - SWL, Jay - N1FDX and Bob - N1EDM. Members present however not in the photos are Jeff - N1ZZN and Larry - K1LJK. Photos by Barry - N1EZH

Below: MARA Members meeting at the Dunkin Donuts parking lot in July 2015 to prepare Communications Checkpoints and Frequencies for the Middleboro YMCA Triathlon where the participants had to Swim, Bike and Run! In the photos from L to R are; Rick - KB1TEE, Paul - KB1MTW, Roy - KB1CYV, John - (Our Net Control for the Event) N1UMJ, Walt - W1WCF and Jessica - KB1ZWZ.



Above: At our August 15, 2015 Taunton Area Communications Group – KC1TAC Annual BBQSO in Celebration of “The Bruce” – N11X (SK), several members from Massasoit Amateur Radio Association and Whitman Amateur Radio Club were also in attendance. With the Banner of “The Bruce” – N11X (SK) in the background are: Ed – KC1DWZ, Rick – KB1TEE, Jeff – WK1D, John – N1UMJ and Bill – NR1FD. Not in the photos are Richard – AG1B, Jay – N1FDX and Mark – KC1ACF. Photos by Barry- N1EZH



Above: At our January 2016 MARA Meeting Jeff-N1ZZN and Rick – KB1TEE gave a Show & Tell of their Tape Measure Beam Antennas.



Above: From L – R: Rick – KB1TEE , Denise – KC1CFO & Bob – N1RTS looking over the Tape Measure Beam Antenna, Richard – AG1B, Paul – KB1MTW, Gary – AB1CQ, Loren – N1IQI, Richard – KC1EHG, Walt – W1WCF, John – N1UMJ, Pete – N1NVV. Photos by Barry – N1EZH.



In the Photos Above Left: At our February 2016 MARA Meeting , Richard – AG1B gave a presentation of his Fox finding equipment which includes a close up of the Antenna / Attenuator box and his Baofeng Transceiver typically set to 146.535 MHz in order to search for the Fox! Above Right: Richard – AG1B demonstrates his Foxbox in operation with Phil – N1XTB and Jeff – N1ZZN looking on! Not in the photos are: Philip – SWL and Loren – N1IQI Photos by Barry – N1EZH



In the Photos – Top Left: At our March 2016 MARA Meeting Rick – KB1TEE gave his presentation on Heat, Smoke and CO2 Detectors and Safety precautions. Top Right: A Heat Detector on top and Combination Smoke and CO2 Detector underneath. Rick reminded everyone to change your batteries when you change your clocks and check the dates on all your Detectors as they only last 5 - 7 years. When they begin to chirp, even when the batteries are replaced, it is time to replace the Detector. Photos by Barry – N1EZH



In the Photos – Above: At our April 2016 “Spring Fling” Potluck Dinner at the Middleborough Fire Department are: Philip – SWL, Phil – N1XTB, Bob – N1RTS, Diane – N1JCK, Linda – SWL, Denise – KC1CFO, Richard – AG1B, Bob – N1EDM, Rick – KB1TEE, Jay – N1FDX, and his 2 Daughters – SWL’s. The food was delicious and a great time was had by all in attendance! Below Photo: In the background are the Special Fire Operations and Incident Command Center Vehicles for our region! Photos by Barry – N1EZH







In the Photos – Top: Our volunteers for the Woody’s Walk, 5 – 10K Road Race on June 4, 2016 are:
Top L – R: Jessica – N1MOJ, Walt – W1WCF, John – N1UMJ (Our Net Control Operator), Bob – N1RTS, Denise – KC1CFO, Alan – WA1BEE, Richard – AG1B. Middle - Jessica – N1MOJ, Walt – W1WCF, John – N1UMJ (Our Net Control Operator), Bob – N1RTS, Barry – N1EZH, Allen – WA1BEE, Richard – AG1B. Bottom: Walt – W1WCF), Denise – KC1CFO, Bob – N1RTS, Paula – N1CHI, Allen – WA1BEE, Richard – AG1B, Not in the above Photos is Derek – KC1DDF. A big thank you to John – N1UMJ for volunteering to be our Net Control Operator and to all the volunteers that came out in support of this Road Race! It would not go as smoothly as it did without your help!
Photos by Barry – N1EZH



Above: On June 25 – 26 our annual ARRL Field day was held. This is a 2016 Field Day photo of everyone from the Massasoit Amateur Radio Association and Whitman Amateur Radio Club who helped with the setup on Saturday morning. Many of our members belong to both Amateur Radio Clubs (Some of us belong to others as well!) and help with the setup and take down at the E. Bridgewater YMCA on Field Day Weekend each year! Among others in the photo are John – WI1G (Outgoing Whitman ARC President Standing in Back Row 6th from left.) and Joe – K1JMA (Newly Elected 2016 Whitman ARC President in Front Row 1st on left.) This was the last event that myself as outgoing MARA President (Barry – N1EZH In Front row 6th from the left.) and all of us as a group participated in prior to our July 2016 MARA Newsletter being Edited and Published by our Newsletter Editor, Rick – KB1TEE this month. Photo by Jeff- WK1D



Presidents notes from KC1CFO Denise Sisson



Hello to all Mara members,

I am truly overwhelmed to have been voted in as president of the club. I am very new to all this so I will be needing help and will very well have many questions. I will do my best to serve the group.

Barry did such a wonderful job; I will try my best to fill his shoes. Rick has agreed to continue with the guest speakers, if anyone has any ideas in this area that would be great.

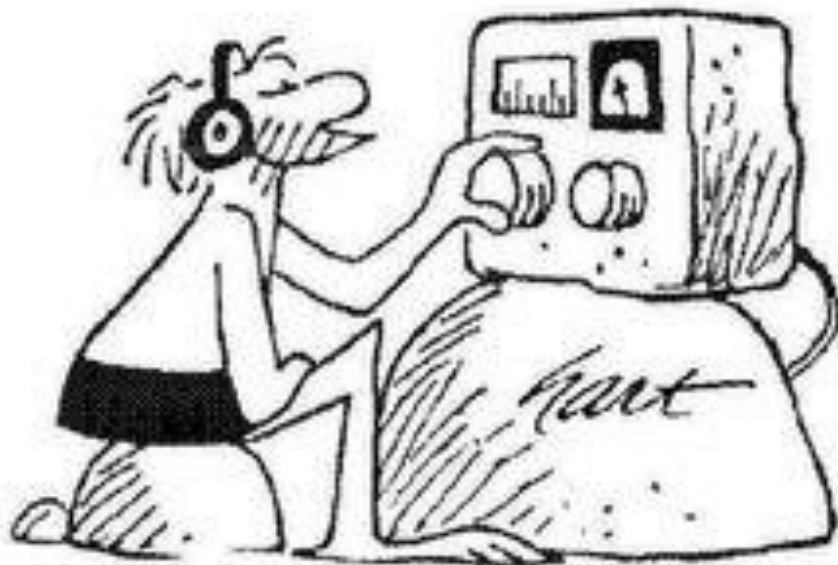
July 17th is the triathlon at the YMCA camp in Middleboro. we will be needing help with the different stations along the race. We will use 14 simplex as in the past and use 147.180 MARA repeater for emergency calls.

We will meet at the Dunkin Donuts in Middleboro on 105 and 28 between 7:30 and 8:00 AM. Thank you to John N1UMJ and Jessica for being net control for past races I hope you can continue to be a great asset to the club.

Rick KB1TEE is running operations from the USS Massachusetts over the summer hopefully we can get some new interest in amateur radio. We have a lot of upcoming events over the summer for us to get out and operate.

I look forward working with all of you!

Denise KC1CFO



(c) 1994 Creator Syndicate, Inc.

I found several cartoon Ham adds I am using as fillers

Secretary's notes for June meeting

OPEN: President Barry – N1EZH opened the meeting at 6:36 PM 17 May 2016. 9 Attendees including 3 officers.

N1EZH – Barry Kennedy (Pres.)
N1ZZN – Jeff Lehmann (V.Pres)
N1XTB – Phil McNamara (Treas)
KB1CYV - Roy Logan
AG1B - Richard Metcalf
W1WCF - Walt Fitzgerald
N1FDX - Jay Zappulla
N1IQI - Loren Pimentel
WA1BEE - Allen Hiltz

[OBJ]

Motion made and accepted to approve the May 2016 MARA Secretary's report as published in the May 2016 newsletter
Motion made and accepted to approve the May 2016 MARA Treasurers report as provided by Phil N1XTB

Woody's walk road race was a success, 8 hams were on the course, with 2 Net controls

The Whitman ARC is once again inviting MARA to join with their field day operation, at the East Bridgewater YMCA

The Camp Yomechas tri-athlon is coming up July 17th, operators including net controls are needed

Still waiting on climber to fix repeater antennas

The Entergy Pilgrim drill has been rescheduled for July 20th, operators invited to join N1XTB at the Bridgewater EOC from 8 until noon, parking not allowed on grass during school hours

Ballots for the election were counted and were unanimous with 11 votes for Denise KC1CFO as president, Jeff N1ZZN VP, Larry K1LJK secretary, and Phil N1XTB treasurer

Jeff N1ZZN

June-August 2016 NE1PL

KB1TEE will be hosting ham radio days on the USS Massachusetts I will be operating from under the canopy on the starboard side next to the rear 16" turret. The dates will be coming soon if you would like to come out and talk up ham radio please email me kb1tee@verizon.net
[Scheduled dates are June 17th and 27th then July 19th, 29th August 6th, 15th 22nd 29th please come out sit and talk up ham radio](#)



Thank you Bob N1EDM and John N1UMJ for making this event easy and thanks to Bill NR1FD, Jay N1FDX for your ideas, HRO Steve Davidson helped me pick the antennas and mounts. Looking forward operating again this summer

ARRL, Community Associations Institute Find Common Ground on Parity Act Language

ARRL and the Community Associations Institute (CAI) -- the national association of homeowners associations (HOAs) -- have reached consensus on provisions of the [Amateur Radio Parity Act](#), H.R. 1301. ARRL and CAI have worked intensively since February to reach agreement on substitute language for the bill in an effort to move it through the US House Energy and Commerce Committee and to overcome objections to the companion US Senate bill, S. 1685. Along the way, the offices of U.S. Representatives Adam Kinzinger (R-IL), Greg Walden, W7EQI, (R-OR), and Anna Eshoo (D-CA) mediated and offered assistance.



ARRL Hudson Division Director and Legislative Affairs Committee Chairman Mike Lisenco, N2YBB, called the agreement "a significant development in the League's 30-year pursuit to secure the ability to erect Amateur Radio antennas in deed restricted communities."

ARRL General Counsel Chris Imlay, W3KD, said the League was pleased to have reached an agreement with CAI over new proposed language in this legislation that both ARRL and CAI endorse and support. "We agree with CAI that the substitute amendment is balanced, and we think that this bill's language is more objective and offers perhaps more guidance to HOAs than would the PRB-1 'reasonable accommodation' test for municipal land use regulations," he said.

Imlay explained that ARRL did not have the final language for the substitute amendment until late last week, and the amended bill has not been introduced in the House as of yet. ARRL planned no announcement about the text of the amended House bill until it was introduced. However, because the text became available from the House Office of Legislative Counsel, and as CAI released the text to its members, it was decided to release the amended text now.

"The bottom line," Imlay said, "is that if the bill is enacted, it would allow every amateur living in a deed-restricted community -- for the first time in the history of Amateur Radio in the US -- the ability to install an effective outdoor antenna."

"That would benefit thousands of current and future hams living in deed-restricted communities," Lisenco added.



Imlay explained that the substitute bill would guarantee that a radio amateur living in a deed-restricted community -- including condominium or townhouse communities -- could install and maintain an "effective outdoor antenna." Achieving the agreement came without disrupting 30 years of zoning case law that has interpreted the PRB-1 federal preemption and protected radio amateurs from overregulation by zoning authorities. The bill incorporates the basic tenets of PRB-1.

ARRL General Counsel Chris Imlay, W3KD. [Rick Lindquist, WW1ME, photo]

According to the substitute bill's language, the FCC would enact rules prohibiting the application of deed restrictions that preclude Amateur Radio communication on their face or as applied. Also prohibited would be deed restrictions that do not permit an Amateur Radio operator living in a deed-restricted community to install and maintain an effective outdoor antenna on property under the licensee's exclusive use or control.

The substitute bill would prohibit deed restrictions that do not impose the minimum practicable restriction on amateur communication to accomplish the lawful purposes of a homeowners association (HOA) seeking to enforce the restriction. Amateurs wishing to install an antenna in a deed-restricted community would have to notify and obtain prior approval of the homeowners association. HOAs would be able to preclude the installation of antennas in common areas -- ie, property not under the licensee's exclusive use.

The substitute measure provides that HOAs could enact *reasonable* written rules governing height, location, size, and aesthetic impact of outdoor antennas and support structures, as well as installation requirements. Those rules could not preclude amateur communication nor restrict the absolute entitlement of each amateur living in a deed-restricted community to an effective outdoor antenna, however. The amended measure reiterates the strong federal interest in Amateur Radio communication in a licensee's residence.

"Community associations should fairly administer private land use regulations in the interest of their communities, while nevertheless permitting the installation and maintenance of effective outdoor Amateur Radio antennas," the negotiated language states. "There exist antenna designs and installations that can be consistent with the aesthetics and physical characteristics of land and structures in community associations while accommodating communications in the Amateur Radio services."

Lisenco cautioned that getting the Amateur Radio Parity Act signed into law still remains a long process. "Much work needs to be done," Lisenco said. "ARRL will still need to call upon the entire membership to contact their elected officials, especially in the Senate, to ask for their affirmative vote on this bill," he stressed.

[More information](#) on the Amateur Radio Parity Act, including a copy of the complete substitute amendment agreed to by ARRL and CAI, is available on the ARRL website.

FCC Investigating Amateur Radio, Commercial Application Processing Glitch

The FCC information technology staff is continuing to look into why the Universal Licensing System ([ULS](#)) Electronic Batch Filing (EBF) system has stopped processing at least some -- and perhaps all -- Amateur Radio exam session files and applications. The stoppage, which began on June 28, initially affected the handling of all Amateur Radio VEC and commercial license applications, said ARRL Volunteer Examiner Coordinator ([VEC](#)) Manager Maria Somma, AB1FM, who alerted the FCC IT Department. Somma said that by June 30, it appeared that the FCC had corrected the broader problem, and processing of most Amateur Radio VEC and commercial applications and exam

session files had resumed.

"The fix for the ARRL VEC remains elusive, however," said Somma. "I assumed the issue would be cleared up quickly, as the FCC has done in the past." She added that

the FCC has been unwilling to reveal the extent of the problem, which she believes still could be affecting applications from outside the ARRL VEC.

According to Somma, resolving the problem has been escalated to Priority 1 at the FCC, and resources have been reprioritized to address the issue.

"I have been in contact with the FCC every day, inquiring about their progress, and will continue to do so until the problem is resolved," Somma said. "I have also asked them to provide us with an alternate filing option as soon as possible."

Somma said that as of July 6, the ARRL VEC had more than 900 applications and nearly 275 exam sessions in the queue and awaiting FCC processing.

"As soon as the FCC staff discovers and corrects the EBF system problem, we will immediately file the backlog, which would take only a day or so to release," Somma estimated.

She said a lot of candidates and volunteer examiners have begun asking why new call signs or license upgrades have not yet been issued, and she is sympathetic to their concerns. "We usually transmit the exam sessions to the FCC as soon as possible, which is 24 to 48 hours from the day they are received in our office," she said. "Therefore, questions from the field about the delay are understandable."

Amateur Electronic Supply Closing after 59 Years in Business

Amateur Electronic Supply ([AES](#)) will close its doors at the end of July after 59 years in business. No reason has been given for the decision to close the business. AES has been a premier player among Amateur Radio equipment retailers for decades, as well as a major presence at Dayton Hamvention® and other events. Various media outlets were informed of the closing in a brief e-mail message on July 6, but word of the closing has not yet appeared on the retailer's website or Facebook page.

"It's with great sadness that I have to tell you that Amateur Electronic Supply (AES) will cease operations at the end of this month," AES National Sales Manager Tom Pachner, W9TJP, said in an e-mail. An employee at the Milwaukee headquarters store, who did not wish to be identified, confirmed that the message was legitimate. It's believed that the AES staff was notified before the July 4th holiday weekend. In addition to the Milwaukee store, AES operates outlets in Cleveland (Wickliffe), Las Vegas, and Orlando.



Fond-du-Lac, Wisconsin, native Terry Serman, W9DIA (SK), [founded AES](#) in 1957 when he was just 18, after getting into the radio-TV business by working in his father's TV and electronics parts store. On January 1, 1998, ownership of AES shifted to Amateur Electronic Supply LLC, headed by Phil Majerus, a prominent Wisconsin businessman. Serman died the following year at the age of 60, after a period of ill health.

For many years, the public face of AES was its Executive Vice President Ray Grenier, K9KHW, who oversaw marketing and advertising for the retailer from 1964 until his retirement in 2013. Grenier nearly singlehandedly produced the famous AES catalog, as well as magazine ads. For about 20 years, he also organized the well-received AES Superfest, a promotional effort begun in 1995 that grew into a hamfest. In April, the AES Superfest hosted the 2016 ARRL Wisconsin Section Convention.

Many radio amateurs reacted to the news on various online forums, expressing surprise, sadness, and dismay, and saying they would miss AES. A few reminisced about having bought their first radios from AES.

The Doctor Will See You Now!

Are Linear Amplifiers Really Worthwhile? Find out by checking out the current (June 30) episode of the "[ARRL The Doctor is In](#)" podcast. Listen...and learn!

Sponsored by [DX Engineering](#), "ARRL The Doctor is In" is an informative discussion of all things technical. Listen on your computer, tablet, or smartphone -- whenever and wherever you like!

Every 2 weeks, your host, *QST* Editor in Chief Steve Ford, WB8IMY, and the Doctor himself, Joel Hallas, W1ZR, will discuss a broad range of technical topics. You can also e-mail your questions to doctor@arrl.org, and the Doctor may answer them in a future podcast.

Enjoy "ARRL The Doctor is In" on [Apple iTunes](#), or by using your iPhone or iPad podcast app (just search for "ARRL The Doctor is In"). You can also listen online at [Blubrry](#), or at [Stitcher](#) (free registration required, or browse the site as a guest) and through the free Stitcher app for iOS, Kindle, or Android devices.

If you've never listened to a podcast before, download our [beginner's guide](#). Just ahead: "HF Propagation" on July 14.

National Parks on the Air Update





**Kings Mountain National Military Park had a reenactment while we were there.
We enjoyed showing a radio to the Revolutionary War militia!**

August 25 is the actual day of the National Park Service's 100th anniversary. Many national parks around the country will be celebrating with events and public outreach. For ham radio operators, setting up a National Parks on the Air ([NPOTA](#)) activation would add a nice flair to these celebrations. Reach out to a park and ask if they would like to include a National Parks on the Air component to any Centennial celebrations they are holding on August 25. If they say yes, then get ready for an adventure!

There are 54 NPOTA activations on the schedule for the week of July 7-13, including the Wupatki National Monument in Arizona, and Saint Paul's Church National Historic Site in New York.

[Details](#) about these and other upcoming activations can be found on the NPOTA Activations calendar.

Keep up with the latest NPOTA news on [Facebook](#). Follow NPOTA on [Twitter](#) (@ARRL_NPOTA).

IARU HF World Championship July 9-10 is Mid-Year Contest Centerpiece

The International Amateur Radio Union (IARU) [HF World Championship](#) over the July 9-10 weekend is the highlight of the mid-2016 contest calendar for radio amateurs around the globe. W1AW/9 in Illinois and NU1AW/6 in California will represent the ARRL and the IARU Secretariat, respectively, as headquarters (HQ) stations. W1AW/9 will operate from the stations of Craig Thompson, K9CT, on CW, and Valerie Hotzfeld, NV9L, and Jerry Rosalius, WB9Z, on phone. NU1AW/6 will be on the air both from the station of Ken Keeler, N6RO, and from the Stanford University Radio Club's W6YX. An unofficial [list](#) of IARU headquarters stations, available for download, has been compiled by Joe Roemming, OZ0J, and Bob Wilson, N6TV.

Headquarters stations count as multipliers, and some new HQ stations are expected to be active for the IARU event. These include J77HQ (DARCI) in Dominica, operated by K5KG, WI9WI, and W4IX; the very similar J87HQ (SVGRS) in St Vincent, operated by KE1B and W6NN, and Z60A in Kosovo, representing SHRAK -- the newest IARU member society -- operated by OH2BH, OZ1IKY, and others.

In addition to HQ stations, members of the IARU Administrative Council (AC) and the three IARU regional executive committees will send AC, R1, R2, and R3, as appropriate, in the exchange. Contacts with IARU member society HQ stations and officials do not count for zone multipliers.

The contest gets under way on July 9 at 1200 UTC on 160, 80, 40, 20, 15, and 10 meters and concludes 24 hours later. Participants may operate on CW, on phone, or both. Non-HQ stations will send a signal report and [ITU zone](#). (The IARU HF Championship [web page](#) includes ITU Zone Borders for the US and Canada.) Read [more](#).



Manhattan Project Sites Now Eligible for National Parks On The Air Event

Juno Spacecraft that Heard Hams Say "HI" Now Orbiting Jupiter

NASA's [Juno](#) spacecraft, which in 2013 listened for earthbound radio amateurs sending "HI" in coordinated, very slow-speed CW, now is circling Jupiter. In a first-of-a kind for an interplanetary spacecraft, Juno [was able to detect](#) 10 meter Amateur Radio signals on October 9, 2013, as it looped past Earth for a gravity-assisted boost on its way to Jupiter. Juno arrived at the solar system's largest planet on July 4.

At the time of the Amateur Radio experiment in 2013, the spacecraft was about 37,500 kilometers (23,250 miles) away, and the signals it received were reported to have been just at or above the noise level. The object of the experiment was to see if Juno's onboard "Waves" experiment would be able to detect the collaborative RF. According to the University of Iowa, after the flyby the Juno team evaluated the Waves instrument data containing the messages.

"We believe this was the first intelligent information to be transmitted to a passing interplanetary space instrument, as simple as the message may seem," said Bill Kurth, a University of Iowa Researcher and Lead Investigator for the Waves instrument. "This was a way to involve a large number of people -- those not usually associated with Juno -- in a small portion of the mission."

Kurth said in 2013 that the activity had raised awareness of the mission, and that some radio amateurs had indicated plans to follow Juno through its science mission to Jupiter. Read [more](#).

Doug Zwiebel, KR2Q, Named CQ World Wide DX Contest Director

Longtime CQ World Wide (CQ WW) DX Contest Committee member Doug Zwiebel, KR2Q, of Randolph, New Jersey, has been named Director of the [CQ World Wide DX Contest](#), CQ magazine Publisher Dick Ross, K2MGA, has announced. Zwiebel succeeds Randy Thompson, K5ZD, who had served for the past 4 years.

Zwiebel -- who is the longest-serving member of the CQ WW Contest Committee, having joined it in 1979 -- brought the contest into the computer age by writing the first mass log-checking program in 1980. In 1986, he suggested the establishment of the CQ Contest Hall of Fame. Ross said Zwiebel brings a unique perspective to the table.

An ARRL member who was first licensed in 1966, Zwiebel began contesting a year later and has never stopped. He holds DXCC Honor Roll #1 and has worked more than 250 DX entities while running less than 1 W. Read [more](#).

Doug Zwiebel, KR2Q.

Hurricane hunters from NOAA



ARRL 2016 Hurricane Preparedness Webinar July 21, 8 PM EDT

[Registration](#) is open now for the 2016 ARRL Hurricane Webinar, July 21 at 8 PM EDT. Don't miss this opportunity to hear from a panel of experts on new developments and preparations for this year's hurricane season, which runs from June 1 to November 30. *New, 2nd Edition of Storm Spotting and Amateur Radio Now Available*

Fully updated, the second edition of the ARRL publication *Storm Spotting and Amateur Radio* is a valuable resource for the Amateur Radio operator who volunteers as a trained storm spotter. This book includes information on resources, training, equipment, safety, storm spotter activation procedures, reportable weather criteria, developing a local storm spotter manual, and the experiences of storm spotters from around the country. Purchase [here](#).

Before Deployment: Personal, Family Safety First

Prepare yourself and your family to ensure their safety and the protection of your property well in advance of any possible activation; you may be required to report to your assignment immediately without being able to stop at home first. Here are a few things to keep in mind:

- Your family needs at least three days of non-refrigerated food and bottled water available.
- Have a medical kit available and make sure your family knows how to use it.
- Have fire extinguishers at home; make sure your family knows how to use them.
- Make your family aware of escape routes from the immediate area. Give them a map.
- Pre-designate a place for them to go: a friend's house or alternate agreed-upon meeting place.
- Have phone numbers in your wallet/purse for your family's alternate shelter(s).
- Have alternate means of communication should cell/landline phone systems be down.
- Keep valuable documents in a safe place or take them with you.
- Have cash on hand for you and your family as ATMs will likely be down.

These are just a few ideas; there are many more. Study FEMA's [Ready](#) website for more. The above list was adapted from the Department of Homeland Security - Office of Emergency Communications - excellent reference guide [Auxiliary Communications Field Operations Guide](#) (AUXFOG).

Second annual operations at the former South Weymouth Naval Air Station August 20, 2016 **0900-1600 W1NAS & K1USN,**

South Weymouth, MA. K1USN Radio Club & Shea Naval Aviation Museum Amateur Radio Club. 14.260 7.260. QSL. Steve Cohn, 10 Hemlock Terr, Randolph, MA 02368. Commemorating the flight of the blimp "Snow Goose" from the South Weymouth Naval Air Station to the Arctic Circle and back while the submarine USS Nautilus was under the polar ice cap. Other freqs and modes as equipment and operators available. VE session at the Museum at 08:30. QSL w/SASE via Steve Cohn, W1OD, 10 Hemlock Terrace, Randolph, MA 02368. www.anapatriotsquadron.com and www.k1usn.com www.anapatriotsquadron.com



Left is KC1DPO/AG OMAR using a Yaesu 450D on 20 meters on the right is WK1D Jeff enjoying a contact with another ham both are under KB1TEE's cabana

BOXBORO

September 9, 10, 11 The ARRL New England Convention
at the Holiday Inn in Boxborough, Massachusetts

Don't just attend Boxboro 2016—BE A PART OF IT! The Boxboro Committee seeks fresh and exciting presentations for this year's ARRL New England Division Convention. (Note the new date!) As a Boxboro speaker, you will have the opportunity to share your subject and knowledge with Amateur Radio operators from around New England, surrounding states, and Canada.

Last year's program included top-notch presentations of both a technical, as well as non-technical nature. This year, we will feature workshops on Friday, a Saturday morning keynote address, and an enhanced Sunday program schedule. It's our hope that Convention attendees will attend the many activities spanning the three-day event.

If you represent a regional club or organization (e.g. YCCC, NEQRP, WRONE, MARS, etc.) we can help facilitate open forums or closed meetings by providing you a meeting space.

Groups who wish to set up information booths should get your requests in early. While the information booths are offered without charge, we ask for some volunteer time in return to assist us with ticket sales and other logistics during the convention.

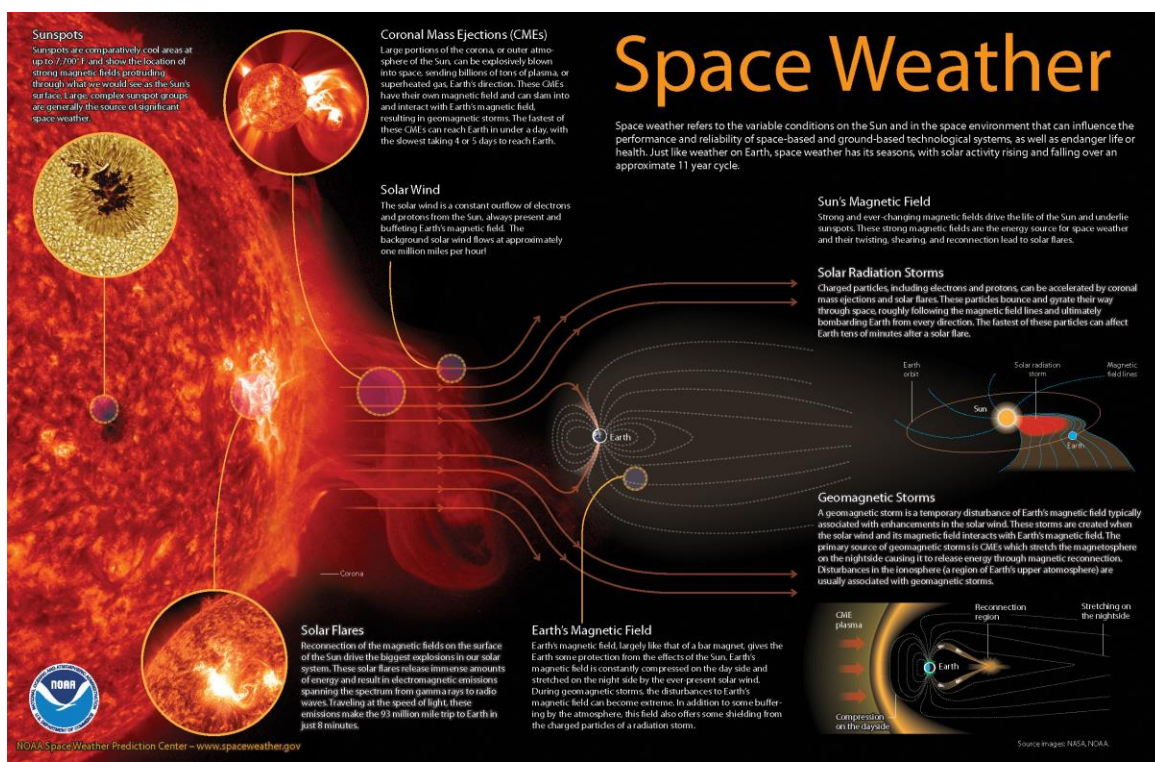
To register as a presenter, please visit <https://goo.gl/Nrwu1g> and complete the online form. For the latest information on Boxboro 2016! please visit <http://www.boxboro.org>, or email or call us if you have additional questions. We look forward to meeting all of you at the convention!

ARRL EASTERN MASSACHUSETTS SECTION

Upcoming ARRL Section, State, and Division Conventions

Upcoming ARRL Section, State, and Division Conventions

- July 2 -- [Eastern Pennsylvania Section Convention](#), Harrisburg, Pennsylvania
- July 8-9 -- [Northern Florida Section Convention](#), Milton, Florida
- July 8-9 -- [Utah State Convention](#), Sandy, Utah
- July 15-17 -- [Montana State Convention](#), East Glacier, Montana
- July 22-23 -- [Oklahoma Section Convention](#), Oklahoma City, Oklahoma
- July 29-31 -- [Central States VHF Conference](#), Rochester, Minnesota
- August 5-6 -- [Texas State Convention](#), Austin, Texas
- August 5-7 -- [Pacific Northwest DX Convention](#), Portland, Oregon
- August 12-14 -- [New Mexico State Convention](#), Albuquerque, New Mexico
- August 19-21 -- [West Virginia State Convention](#), Weston, West Virginia
- August 20-21 -- [Southeastern Division Convention](#), Huntsville, Alabama
- August 21 -- [Kansas State Convention](#), Salina, Kansas
- September 3-4 -- [North Carolina State Convention](#), Shelby, North Carolina
- September 9-11 -- [New England Division Convention](#), Boxborough, Massachusetts
- September 10 -- [Kentucky State Convention](#), Shepherdsville, Kentucky
- September 10 -- [Virginia Section Convention](#), Virginia Beach, Virginia
- September 16-17 -- [W9DXCC Convention](#), Schaumburg, Illinois
- September 16-18 -- [ARRL/TAPR Digital Communications Conference](#), St Petersburg, Florida
- September 17-18 -- [Illinois State Convention](#), Peoria, Illinois
- September 24 -- [North Dakota State Convention](#), West Fargo, North Dakota
- September 24 -- [Washington State Convention](#), Spokane Valley, Washington



SPACEWEATHER.COM

NO SOLAR FLARES: Despite an uptick in the sunspot number, solar activity remains very low. The sun's X-ray output is [flatlining](#) as no sunspot seems capable of producing an explosion. NOAA forecasters say the chance of a strong flare today is no more than 1%.

Solar flare alerts: [text](#) or [voice](#)

GEOMAGNETIC UNREST: For the 3rd day in a row, Earth is moving through a fast-moving stream of solar wind. Resulting [G1-class](#) geomagnetic storms have ignited some fantastic auroras over Antarctica. Yesterday, Argentina's Belgrano base, researcher Saiquita Gabriel grabbed his guitar and joined the show:

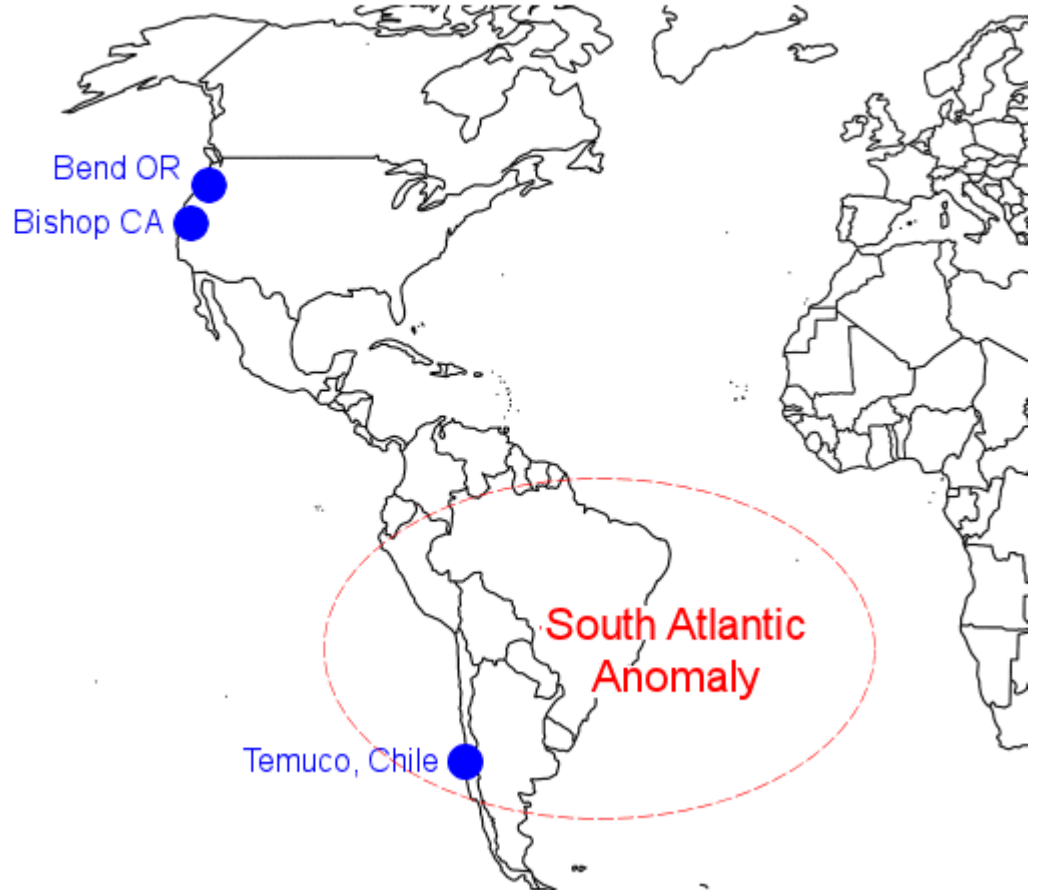


"It was a magical experience," says Gabriel. "I was so happy!"

The show's not over. Earth could be inside this broad stream of solar wind for as much as two more days. Dark winter skies in Antarctica favor continued visibility of southern lights--with an Argentine soundtrack, of course. **Aurora alerts:** [text](#) or [voice](#)

BALLOONING INTO THE SOUTH ATLANTIC ANOMALY: On July 18th, Spaceweather.com and the students of [Earth to Sky Calculus](#) will attempt a simultaneous launch of 3 space weather balloons from 2 continents. The goal of the flight is to measure the amount of atmospheric radiation in the South Atlantic Anomaly over Chile compared to similar latitudes in the USA. This has never been done before, and the results should be interesting.

Intercontinental Space Weather Balloon Launch July 18-19, 2016



Students working with Spaceweather.com have been launching balloons into the stratosphere over California since May 2014. This triple balloon flight will expand upon those measurements to cover more than 70 degrees of latitude and 6,000 miles of geographical distance.

Of special interest is the South Atlantic Anomaly, a dip in the Earth's magnetic field which allows cosmic rays, and charged particles to reach lower into the atmosphere. We will be flying a balloon equipped with X-ray/gamma-ray sensors into the outskirts of the Anomaly from Temuco, Chile, measuring dose rates all the way from sea level to the stratosphere. Comparisons will be made with identical measurements far from the Anomaly in California and Oregon. Stay tuned!

The K7RA Solar Update

Tad Cook, K7RA, Seattle, reports: The recent zero-sunspot period (June 23-July 4) ended when a single [sunspot group](#) (2560) appeared on July 5. Sunspot numbers were 23 and 11, respectively, on July 5 and 6. Compared to the previous week, average daily sunspot number rose from zero to 4.9. Average daily solar flux declined from 75.6 to 73.1. The average planetary A index dropped from 9 to 6.7, and the average mid-latitude A index declined from 9.1 to 8.3.

Predicted solar flux shows a rising trend for the next few days, with flux values from USAF/NOAA at 77, 78, and 79 on July 7-9; 80 on July 10-13; 74 on July 14-16; 72 on July 17-30; 74 on July 31-August 12, and 72 on August 13 and beyond.

Predicted planetary A index is 18, 15, and 10 on July 7-9; 8, 15, and 12 on July 10-12; 8, 10, and 8 on July 13-15; 5 on July 16-18; 15, 12, 10, 8, and 10 on July 19-23; 5 on July 24-27; 8 and 5 on July 28-29; 10 on July 30-31; 5 on August 1-3; 12, 10, 8, and 18 on August 4-7; 12, 8, 10, and 8 on August 8-11, and 5 on August 12-14.

At 2352 UTC on July 6, the Space Weather Services in Australia issued a geomagnetic warning: The effect of a co-rotating interaction region and a high speed solar wind stream may raise geomagnetic activity to minor storm levels on July 7 and 8.

Sunspot numbers for June 30-July 6 were 0, 0, 0, 0, 0, 23, and 11, with a mean of 4.9. The 10.7 centimeter flux was 72.9, 72, 70.9, 72.3, 73.8, 72.4, and 77.1, with a mean of 73.1. Estimated planetary A indices were 6, 7, 9, 9, 7, 4, and 5, with a mean of 6.7. Estimated mid-latitude A indices were 7, 9, 11, 9, 9, 6, and 7 with a mean of 8.3.

[Send](#) me your reports and observations.



WB5ZIF

Jerry Werner
 2426 St. Mark Court
 Donaldsonville, LA 70346

Ascension Parish - EM40

Confirming QSO with	Date Day / Mo / Yr	UTC	MHz	RST	Mode	QSL	
						Pse	Tnx

New England Area Ham - Electronic Flea Market

13 Aug	St Albans VT	STARC @VFW \$5@8		Arn N1ARN	802 309 0666	
6 Aug	Milo ME	PARC 8AM@Kiwanis Free		George WA1JMM	207 441 6112	W+
20 Aug	Windsor ME	AARA @FG		Bill K1NIT	207 512 0312	A+
21 Aug	Cambridge MA	Flea at MIT		Mitch	617 253 3776	+
		Third Sunday April thru October				
28 Aug	Adams MA	NoBARC @BoweFld 6:30sell 7:30buy		Eric KA1SUN	413 743 9975	
28 Aug	Newtown CT	CARA @TownHall		John KC1CBL	203 417 0160	A+
17 Sept	Forestdale RI	RIAFMRS @VFW \$5/Sp@8		Pete AA1PL	401 639 4484	
9,11 Sept	Boxboro MA	FEMARA NE Conv *NEW DATE *		Mike K1TWF	978 250 1235	+
10 Sept	Windsor CT	VR+C Mus 115 Pierson LN @8AM Outdoor		John	860 673 0518	+
18 Sep	Cambridge MA	Flea at MIT		Mitch	617 253 3776	
24 Sep	Brookline NH	NEARC Antiqe @EvntCr \$10@7:30 \$5@8:30		Bruce	603 772 7516	+
9 Oct	Queens NY	HoSARC @HoS		Stephen WB2KDG	718 898 5599	A+
14,15 Oct	Deerfield NH	NEARfest XX @FG		Mike K1TWF	978 250 1235	+
16 Oct	Cambridge MA	Flea at MIT		Mitch	617 253 3776	
16 Oct	Meriden CT	Nutmeg @Sheraton		John N1GNV	203 440 4973	A+
29 Oct	Gales Ferry CT	TCARC @FireCo		Darryl WA1DD	860 443 7799	+
30 Oct	Hicksville NY	LIMARC @Levitt Hall		Richard K2KNB	516 694 4937	A+
12 Nov	Bourne MA	FARA @UpperCC VoTech \$5@9 \$10/S@7		Ralph N1YHS	508 548 0422	
3 Dec	Windsor CT	VR+C Mus 115 Pierson LN @8AM Indoor		John	860 673 0518	+

International Lighthouse Lightship Weekend



International Lighthouse Lightship Weekend Official Web Site **<http://illw.net/>**

*AN ANNUAL AMATEUR RADIO WEEKEND EVENT. (NOT A CONTEST)
FOUNDED IN 1995 BY TWO MEMBERS OF THE AYR AMATEUR RADIO GROUP, (AARG), SCOTLAND,
AND HELD ON THE THIRD FULL WEEKEND IN AUGUST.*

20-21 August 2016 - Duration 48 hours from 0001 UTC 20.8.2016 Year after - 19-20 August 2017

Welcome to the web site for the ILLW. This annual amateur radio event was started in Scotland by John Forsyth, GM4OOU, and the late Mike Dalrymple (GM4SUC), both members of Ayr Amateur Radio Group (AARG). Through the years the event has grown probably far beyond what John and Mike envisaged for it all those years ago. The fact that some 85 countries have been represented in this event since inception clearly shows that it is well on its way to becoming a premier event on the ham radio calendar.

PURPOSE

The basic objective of the event is to promote public awareness of lighthouses and lightships and their need for preservation and restoration, and at the same time to promote amateur radio and to foster International goodwill. Lighthouses are fast becoming an endangered species with the introduction of Global Positioning Systems and Satellite Navigation and the automation of the light source to solar power which has resulted in the withdrawal of management personnel (Keepers). It is hoped that this event will highlight this situation and help prevent further desecration of these magnificent structures all around the world.

So come and join us in the fun of the weekend, establish a station at a lighthouse, lightship or maritime beacon. The more the merrier. If you decide to join us in the fun just fill in the official online entry form with your details. This will enable other stations to be aware of who is participating in the event. You may also send you entry, or any questions regarding the rules, via the "Contact Us" link in the main menu.

HAM RADIO LOCAL AREA NETS

If you know of a Ham Radio Local Area Net that is not listed here, a typo on the information, or a Net listed which is no longer active, please contact Barry – N1EZH at: N1EZH@comcast.net, so this list can be updated. All Frequencies are in MHz and 6 Meters (50.0 MHz and up.), are FM Mode unless otherwise noted. Thanks!

- Sunday:** **WA1NPO – WARPSN Net, 8:30 AM, Whitman ARC Rptr, 147.225 +, PL 67.0**
6 Mtr AM Net, 5:00 PM, 50.400.0 AM, Scituate
Pilgrim Amateur Wireless Assoc. 10 Meter Net, 7:00 PM, 28.375.0 USB
Cape & Island Traffic Net, Every Night at 7:30 PM, Falmouth N1YHS Rptr, 147.375 + PL 110.9
Genesis ARC CW Training Net, 7:00 PM, Plymouth N1ZIZ Rptr, 146.685 – PL 82.5
Eastern MA 2 Mtr Traffic Net, Every Night at 8:00 PM, Boston W1BOS Rptr, 145.230 – PL 88.5
Norfolk County Radio Association Net, 8:00 PM, Walpole Rptr, 146.895 – PL 123.0
- Monday:** Cape and Islands Weather Net, 6:00 AM, Mon – Sat, Dennis K1PBO Rptr, 146.955 – PL 88.5
Fairhaven Weather Net, 8:00 PM, SEMARA Rptr, 147.000 + PL 67.0
Norfolk County Emergency Preparedness Net, 8:00 PM, Walpole Rptr, 146.895 – PL 123.0
Falmouth ARA Net, 7:30 PM, Falmouth K1RK Rptr, 146.655 – PL 88.5
Boston ARC Rag Chew Net, 9:00 PM, Boston W1BOS Rptr, 145.230 – PL 88.5
- Tuesday:** Massasoit ARA Net, 8:00 PM, Bridgewater W1MV Rptr, 147.180 + PL 67.0 (Except 3rd Tue!)
Genesis ARC 2 Mtr Rag-Chew Net, 7:30 PM, Plymouth N1ZIZ Rptr, 146.685 – PL 82.5
Fairhaven Weather Net, 8:00 PM, SEMARA Rptr, 147.000 + PL 67.0
Norwood Amateur Radio Club Net, 8:00 PM, Norwood Rptr, 147.210 + PL 100.0
220 MHz Day! Try to find a 220 Repeater near you and give a call out!
- Wednesday:** Taunton ACG, KC1TAC, 2 Mtr Simplex Net, 8:30 PM, 145.770
Whitman ARC 10 Meter Rag-Chew Net, 8:00 PM, 28.333.0 USB (Except 1st Wed!)
Blackstone Valley ARC, 2 Mtr Simplex Net, 7:00 PM, 146.565
Fairhaven Weather Net, 8:00 PM, SEMARA Rptr, 147.000 + PL 67.0
Cape and Islands ARES Net, 8:00 PM, Dennis K1PBO Rptr, 146.955 – PL 88.5
Waltham Wranglers Swap Net. 9:00 PM, Waltham W1MHL Rptr, 146.64 – PL 136.5
- Thursday:** Fairhaven Weather Net, 8:00 PM, SEMARA Rptr, 147.000 + PL 67.0
Genesis ARC CW Training Net, 7:00 PM, Plymouth N1ZIZ Rptr, 146.685 – PL 82.5
10 Mtr General Class Rag-Chew Net, 8:00 PM, 29.470.0 FM
Sturdy Mem. Hosp. ARC ARES Practice Net, 8:30 PM, K1SMH Rptr, 147.195 + PL 127.3
900 MHz Day! Try to find a 900 Repeater near you and give a call out!
- Friday:** Fairhaven Weather Net, 8:00 PM, SEMARA Rptr, 147.000 + PL 67.0
- Saturday:** South Shore Skywarn Net, 8:00 PM, Bridgewater W1MV Rptr, 147.180 + PL 67.0
VKEMCOMM Echolink Conference node: 270177/IRLP 9508 (due to *WX-TALK* Echolink conference node: 7203/IRLP 9219 outage) Refer to: <http://www.voipwx.net/>

Massasoit Amateur Radio Association Executive board

President Denise Sisson KC1CFO
Vice President Jeff Lehmann N1ZZN
Treasurer: Phil McNamara N1XTB
Secretary: Larry Kenney K1LJK
Call sign Trustee: Phil McNamara N1XTB

Repeater Trustees: Carl Aveni N1FY., Lou Harris N1UEC, Bob Mandeville N1EDM

2M Repeater 147.180+ (Tone 67.0)

440 Repeater 444.550+ (Tone 88.5)

APRS Node Node 144.39 W1MV-1

Packet BBS 145.09 N1XTB-4

Packet Node Brockton 145.09 W1JOE-7 (BROCK)

MARA Web page <http://www.w1mv.org/>

Newsletter Editor kb1tee@gmail.com

WARC Web Page <http://www.wa1npo.org>

Qsl via www.eqsl.cc

Skywarn www.powersrvcs.org/w1gmf/skywarn.htm

Mailing Address P.O. Box 428 Bridgewater, MA 02324

Monthly meetings are held the 3rd Tuesday of each month at 6:30PM at the Bridgewater Public Library in Bridgewater Center. Talk-in is on 147.180+

Our **Meetings-On-The-Air** are held all other Tuesday evenings at 8PM on 147.180+ and includes the Westlink News Report with the latest news about happenings in the world of Amateur Radio.

The **South Shore Skywarn Net** is held every Saturday evening at 8PM local time on 147.180+ and is open to all hams.

VE Exams are held the 2nd Saturday of every month, in Braintree contact Steve Cohen , W1OD via email w1od@arrl.net. Walk-ins are no longer permitted. We will be hosting VE exams at 8:45 at the Watson building. If you know of anyone planning to take an exam, please have them drop a note to Steve to confirm a reservation.

Editor Rick Emord KB1TEE



TV and Movie radio use

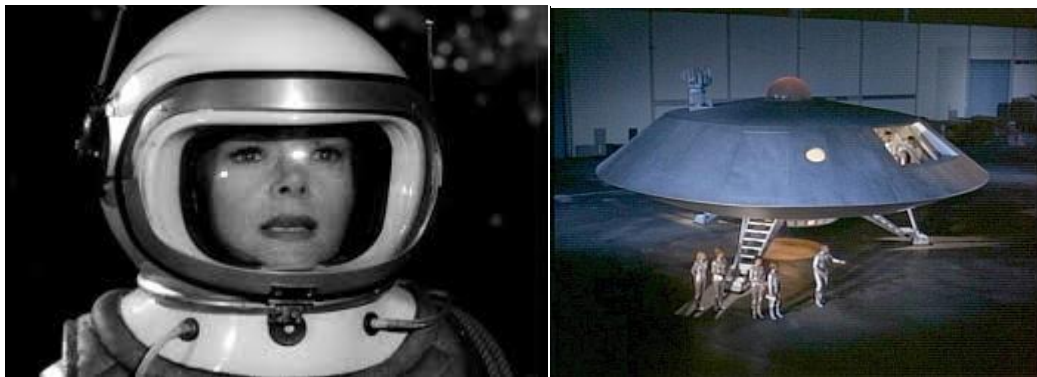


Lost in Space is an American science fiction television series following the adventures of a family of pioneering space colonists who struggle to survive in a strange and often hostile universe after their ship was sabotaged and thrown off course. It was created and produced by Irwin Allen, filmed by 20th Century Fox Television, and broadcast on CBS. The show ran for three seasons, with 83 episodes airing between 1965 and 1968. The first television season was filmed in black and white, with the second and third seasons filmed in color.

Though the original television series concept centered on the Robinson family, many later story lines focused primarily on Dr. Zachary Smith, played by Jonathan Harris. Smith and the Robot were both absent from the original unaired pilot as the addition of their characters was decided once the series had been commissioned for production. Originally written as an utterly evil but careless saboteur Smith gradually becomes the troublesome, self-centered, incompetent foil who provides the comic relief for the show and causes most of the episodic conflict and misadventures.^[1] In the unaired pilot, what causes the group to become lost in space is a chance encounter with a meteor storm, but in the first aired episode, it is Smith's unplanned presence on the ship that sets the ship off course into the meteor field, and his sabotage which causes the Robot to send the ship into a hyperdrive. Smith is thus the key to the story.



Dr. John Robinson (Guy Williams), Dr. Maureen Robinson (June Lockhart), Major Don West (Mark Goddard), Judy Robinson (Marta Kristen), Penny Robinson (Angela Cartwright), Will Robinson (Billy Mumy), Dr. Zachary Smith (Jonathan Harris), The Robot is a Class M-3 Model B9, General Utility Non-Theorizing Environmental Control Robot





By the end of the first season, the character of Smith becomes permanently established as a bungling, self-serving, greedy and manipulative coward. These character traits are magnified in subsequent seasons. His haughty bearing and ever-present alliterative repartee were staples of the character. While he and Major West repeatedly clashed over his goldbricking or because of some villainy he had perpetrated, the Robot was usually the preferred victim of his barbed and acerbic wit.

Despite Harris being credited as a "Special Guest Star" for every episode, Smith became the pivotal character of the series.^[5] Harris was the last actor cast, with the others having been in the pilot episode. He was informed that he would "have to be in last position" in the credits. Harris voiced discomfort at this, and suggested appearing in the last position as "Special Guest Star." After having "screamed and howled," Allen agreed.^[6] The show's writers expected that Smith would be a temporary villain who would only appear in early episodes. Harris, on the other hand, hoped to stay on the show, but he found his character very boring; encouraged by Allen, the actor "began rewriting his lines and redefining his character" by playing Smith in an attention-getting, flamboyant style. Mummy recalls how, after he had learned his own lines, Harris would ask to rehearse with him using his own dialogue. "He truly, truly single-handedly created the character of Dr. Zachary Smith that we know," said Mummy. "This man we love-to-hate, a snivelling coward who would cower behind the little boy, 'Oh, the pain! Save me, William!' That's all *him!*"

